

## LIST OF CLAIMS / AMENDMENTS

Please amend claims 1, 7, 15-16, 19-20, 22, and 24-25 as shown herein.

Claims 1-27 are pending and are listed following:

**1. (currently amended)** A method implemented at a server device, the method comprising:

gathering region data for displaying a region of a server desktop remotely on a client display, wherein the region data describe a shape and a position of the region;

gathering graphics data for the region, wherein the graphics data describe visual content of the region, and wherein the region data and the graphics data are gathered synchronously so as to maintain an association of the region data and the graphics data; and

sending the region data and the graphics data to a client in a sequential order that represents ~~while maintaining~~ the association between the region data and the graphics data such that the client can determine which graphics data and region data are related.

**2. (original)** The method as recited in claim 1, wherein the region data and the graphics data are gathered in a single display driver.

1           **3. (original)**   The method as recited in claim 2, wherein the region  
2 data and the graphics data are gathered and stored in a format of a remoting  
3 protocol.

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5           **4. (original)**   The method as recited in claim 3, wherein the region  
6 data is synchronously gathered by a display driver-level window object created to  
7 contain the shape and position information.

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9           **5. (original)**   The method as recited in claim 3, wherein the graphics  
10 data is synchronously gathered by the display driver.

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12           **6. (previously presented)**   The method as recited in claim 5,  
13 wherein the display driver synchronously gathers the graphics data by gathering  
14 drawing commands issued to a graphics device interface subsystem of an  
15 operating system of the server.

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17           **7. (currently amended)**   The method as recited in claim 1,  
18 wherein the sending further includes ~~forming a sequence of~~ region data and the  
19 graphics data, wherein is sent to the client in the sequential order such that the  
20 region data precedes the graphics data.

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22           **8. (original)**   The method as recited in claim 7, further comprising  
23 sequencing the region data to precede the graphics data using rules of a remoting  
24 protocol.

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2       **9. (original)**   The method as recited in claim 8, further comprising  
3 receiving the region data and the graphics data for display on a client and  
4 displaying the graphics data according to the preceding region data.

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6       **10. (previously presented)**   The method as recited in claim 1,  
7 wherein in response to a bandwidth for the sending becoming too low to send the  
8 region data and the graphics data, reducing the amount of data to send by sending  
9 no region data and sending graphics data for the entire server desktop.

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11       **11. (previously presented)**   The method as recited in claim 1,  
12 wherein in response to a bandwidth for the sending becoming too low to send the  
13 region data and the graphics data, reducing the amount of data to send by sending  
14 region data for a subset of the region and by sending graphics data for the subset.

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16       **12. (original)**   The method as recited in claim 11, wherein the subset  
17 has a geometry that requires less region data to describe.

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19       **13. (previously presented)**   The method as recited in claim 1,  
20 wherein in response to a bandwidth for the sending becoming too low to send the  
21 region data and the graphics data, reducing the amount of data to send by  
22 surrounding the region with a larger region that requires less data to describe and  
23 enlarging the visual content of the region to fit the larger region.  
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1           **14. (original)**   The method as recited in claim 1, further comprising:  
2           receiving the region data and the graphics data; and  
3           displaying the graphics data as graphics in a region of a client desktop  
4           described by the region data.

5  
6           **15. (currently amended)**   A remoting synchronization engine,  
7           comprising:

8           a region data gathering module to gather region data describing a region of  
9           a display desktop of a server to be remotely displayed on a client, wherein the  
10          region data describe a shape and a desktop position of the region;

11          a graphics data gathering module to gather graphics data, wherein the  
12          graphics data describe a visual content of the region, and wherein the region data  
13          and the graphics data are gathered synchronously so as to maintain an association  
14          of the region data and the graphics data; and

15          a display driver at the server to collect the region data and the graphics data  
16          ~~and to send the region data and the graphics data from the server to the client~~  
17          while maintaining the association between the region data and the graphics data;  
18          and

19          a data output scheduler to send the region data and the graphics data to the  
20          client in a sequence which represents the association between the region data and  
21          the graphics data.

1           **16. (currently amended)**     The remoting synchronization engine as  
2 recited in claim 15, ~~further comprising a data output scheduler associated with the~~  
3 ~~display driver to send the region data and the graphics data to the client in a~~  
4 ~~sequence, wherein the region data precedes the graphics data in the sequence~~  
5 ~~which represents the association between the region data and the graphics data~~  
6 ~~synchronized with the region data.~~

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8           **17. (original)**     The remoting synchronization engine as recited in  
9 claim 16, further comprising a bandwidth compensator to maintain security with  
10 respect to the synchronized region data and the synchronized graphics data during  
11 a condition of low bandwidth.

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13           **18. (original)**     The remoting synchronization engine as recited in  
14 claim 15, further comprising a data gathering scheduler to schedule synchronous  
15 gathering of region data and graphics data synchronized to the region data.  
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1           19. (currently amended)     A     synchronized     data     receiver,  
2 comprising:

3           a region subsystem to receive region data synchronized with graphics data  
4 from a server in a sequential order as, ~~the region data and the graphics data~~  
5 gathered synchronously from a server display so as to maintain an association of  
6 the region data and the graphics data, and the region subsystem also to designate a  
7 region of a client display based on the region data for display of the graphics data;  
8 and

9           a graphics subsystem to receive the graphics data synchronized with the  
10 region data and to display graphics in the region based on the graphics data.

1        **20. (currently amended)**     A synchronized remoting system,  
2 comprising:

3        a means for producing visual content at a server to be remotely displayed  
4 on a client;

5        a means for designating a visual region of the visual content;

6        a means for gathering region data describing a geometry of the visual  
7 region;

8        a means for gathering graphics data describing the visual content in the  
9 visual region, wherein the graphics data is gathered synchronously with the region  
10 data so as to maintain an association of the region data and the graphics data; and

11        a means for sending the region data and the graphics data from the server to  
12 the client in a sequential order which represents an association between the region  
13 data and the graphics data, wherein region data in synchronicity with particular  
14 graphics data precedes the particular graphics data.

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16        **21. (previously presented)**     The synchronized remoting system as  
17 recited in claim 20, further comprising:

18        a means for receiving the region data and the graphics data at the client; and

19        a means for displaying the graphics data as graphics in a region of a client  
20 desktop described by the region data.

1       **22. (currently amended)**       A method, comprising:

2       transmitting region data describing geometry of a visual region to be  
3 remotely displayed, wherein the region data recurs at regular intervals in a data  
4 stream to update the geometry of the visual region; and

5       transmitting graphics data describing visual content of the visual region,  
6 wherein the graphics data recurs at the regular intervals to update the visual  
7 content and wherein the region data of each regular interval precedes the graphics  
8 data of the corresponding regular interval in the data stream in a sequential order  
9 which represents an association between the region data and the graphics data.

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11       **23. (previously presented)**   The method as recited in claim 22,  
12 wherein the region data and the graphics data for each regular interval are gathered  
13 synchronously so as to maintain an association of the region data and the graphics  
14 data.



1           **24. (currently amended)**       A method, comprising:

2           gathering region data and graphics data synchronously so as to maintain an  
3           association of the region data and the graphics data from a visual region of a  
4           computing server display to be remotely displayed on a client display;

5           if bandwidth is sufficient for sending the region data and the graphics data  
6           to the client, then sending the region data and the graphics data to the client,  
7           wherein a region datum in synchronicity with a graphics datum is sent before the  
8           graphics datum in a sequential order that represents the association of the region  
9           data and the graphics data;

10          if bandwidth is not sufficient for sending the region data and the graphics  
11          data to the client, then

12               (a)    if the client owns an entirety of information displayable on  
13               the computing server display, then sending only graphics data describing  
14               the entire visual content of the computing server display; but

15               (b)    if the client does not own an entirety of information  
16               displayable on the computing server display, then

17                       (i)    if visual content of the visual region can be truncated,  
18                       then selecting a smaller visual region inscribed in the visual region  
19                       and sending synchronized region data and synchronized graphics  
20                       data associated with the smaller visual region[.]; but

21                       (ii) if the visual content of the visual region cannot be  
22                       truncated, then selecting a larger visual region circumscribing the  
23                       visual region, sending synchronized region data and synchronized  
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1 graphics data associated with the larger visual region, and resizing  
2 visual content of the visual region to fit the larger visual region.

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4 **25. (currently amended)** One or more computing device readable  
5 media containing instructions that are executable by a computing device to  
6 perform actions comprising:

7 gathering region data for displaying a visual region of a server desktop  
8 remotely on a client display, wherein the region data describe a shape and a  
9 position of the visual region;

10 gathering graphics data for the visual region, wherein the graphics data  
11 describe a visual content of the visual region, and wherein the region data and the  
12 graphics data are gathered synchronously so as to maintain an association of the  
13 region data and the graphics data; and

14 sending the region data and the graphics data to a client in a sequential  
15 order that represents ~~while maintaining~~ the association between the region data  
16 and the graphics data such that the client can determine which graphics data and  
17 region data are related.

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19 **26. (previously presented)** The one or more computing device  
20 readable media as recited in claim 25, wherein maintaining the association further  
21 comprises preceding graphics data to be sent to the client with the region data  
22 synchronized to the graphics data.

1           **27. (original)**   The one or more computing device readable media as  
2 recited in claim 25, wherein the region data and the graphics data are  
3 synchronously gathered into one display driver.  
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